

## **REMARKS**

### **Specification**

The Substitute Specification filed on June 17, 2002 and amended in the Response to Office Action filed on November 8, 2002 has been amended to correct certain obvious editorial and/or typographical errors. For example, the spelling of the word “Tymine” on page 36, line 16 has been corrected to recite “Thymine.” The spelling of the term “amino acidic” on page 36, lines 9, 18, and 23, page 37, lines 18 and 28, and page 38, lines 6 and 15 has been corrected to recite “amino acid.” The spelling of the term “immuno modulant” on page 10, line 26 has been corrected to recite “immuno-modulant.” In addition, all recitations of “Seq. 1,” “Seq. 2,” “Seq. 3,” “Seq. 4” and “Seq. 5” in the specification have been replaced with sequence identifiers in the proper format, *i.e.*, “SEQ ID NO:1,” “SEQ ID NO:3,” “SEQ ID NO:5,” “SEQ ID NO:7” and “SEQ ID NO:9,” respectively. Also, the recitation “Seq. 1-7” on page 10, line 19 has been replaced with “Pep. 1-7, SEQ ID NOS:11-17, respectively.”

The description concerning the cys22 mutant on page 36, lines 15-20 has been amended. In particular, the expression “substitution of Timine (T) nucleotide in position 66 starting from the 5' end with the Guanine (G) nucleotide” on page 36, lines 16-17 has been replaced with “substitution of Thymine (T) nucleotide in position 64 starting from the 5' end with the Guanine (G) nucleotide.” As taught in the specification at page 36, lines 17-19, the cys22 mutant contains a cysteine to glycine substitution at position 22. Since the original codon TGT (at positions 64-66) codes for cysteine (wildtype), a T-to-G substitution at position 64 would result in the codon GGT, which codes for glycine (present in the cys22 mutant), whereas a T-to-G substitution at position 66 would result in the codon TGG, which codes for tryptophan (not present at residue 22 in the cys22 mutant). Thus, it would be clear to one skilled in the art that a T-to-G substitution at position 64 is what is present in the cys22 mutant.

The description concerning the lys41 mutant on page 36, lines 20-24 has been amended. In particular, the expression “substitution of the Timine (T) nucleotide in position 123 from the 5' end with the Cytosine (C) nucleotide” on page 36, line 21 has been replaced with “substitution of the Adenine (A) nucleotide in position 122 from the 5' end with the Cytosine (C) nucleotide.” First, as indicated by the nucleotide sequence of wildtype Tat (SEQ NO:1), the nucleotide at position 123 is adenine (A), not thymine (T). Second, since the original codon AAA (at positions 121-123) codes for lysine (wildtype), an A-to-C substitution at position 122 would result in the codon ACA, which codes for threonine

(present in the lys41 mutant), whereas an A-to-C substitution at 123 would result in the codon AAC, which codes for asparagine (not present at residue 41 in the lys41 mutant). Thus, it would be clear to one skilled in the art that a A-to-C substitution at position 122 is what is present in the lys41 mutant.

The nucleotide sequence of the cys22 mutant (SEQ ID NO:3) as disclosed on page 37, lines 11-17 has been amended to insert a thymine (T) between position 62 (C) and 63 (G). Support for the amendment can be found in the specification at, *inter alia*, page 36, lines 15-20.

Nucleotide residues 122 (A) and 123 (C) of the nucleotide sequence of the lys41 mutant (SEQ ID NO:5) as disclosed on page 37, lines 21-27 have been replaced with cytosine (C) and adenine (A), respectively. Support for the amendment can be found in the specification at, *inter alia*, page 36, lines 20-24.

Nucleotide residues 122 (A) and 123 (C) of the nucleotide sequence of the lys41-RGD mutant (SEQ ID NO:9) as disclosed on page 38, lines 9-14 have been replaced with cytosine (C) and adenine (A). Support for the amendment can be found in the specification at, *inter alia*, page 36, lines 29-31.

No new matter has been added by these amendments.

### **Claims**

Claims 62, 63, 65, 66, 68, 69, 89-103, 105-112, 114, 116, 117, 119, 121-123, 142-165, 167, 168, 179, 181-196 and 198-207 will be pending in this application after entry of the Amendment Under 37 C.F.R. § 1.111 filed on January 8, 2009.

Applicant has cancelled claims 192-196 and 198 as drawn to non-elected inventions, without prejudice to Applicant's right to pursue the subject matter of the cancelled claims in this or other related applications.

Claims 62, 146, 155, 193 and 199 have been amended herein for purposes of clarity. In particular, Applicant has amended these claims such that the meaning of a biologically active, isolated HIV Tat protein would be clearer.

No new matter has been added by these amendments.


After entry of these amendments, claims 62, 63, 65, 66, 68, 69, 89-103, 105-112, 114, 116, 117, 119, 121-123, 142-165, 167, 168, 179, 181-191 and 199-207 will be pending in the present application. Entry of the foregoing amendments and consideration of these remarks are respectfully requested.

**CONCLUSION**

Entry of the foregoing amendments and remarks into the record of the above-identified application is respectfully requested. Applicant submits that the application is in condition for allowance. If any issues remain in connection herewith, the Examiner is respectfully invited to telephone the undersigned to discuss the same.

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Respectfully submitted,

  
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